

Amendments to the Claims

The following listing of claims will replace all prior versions of claims in the application.

1-11. (Canceled)

12-15. (Canceled)

16. (Currently amended) ~~The light-emitting diode device of claim 12, wherein said adhesive sheet comprises a polymerization catalyst by which epoxy groups can be ring opened polymerized,~~ A light-emitting diode device comprising a light-emitting diode element, a circuit board, a fluorescent material-containing resin, a lens and a fluorescent material-containing resin sealing frame, wherein said circuit board is adhered to the sealing frame by an adhesive sheet comprising the reaction product of

a thermoplastic polymer containing epoxy groups,

a thermoplastic polymer which contains no epoxy group, and

a polymerization catalyst which can effect a ring opening polymerization of the epoxy groups,

and in which said thermoplastic polymer is cross-linked so that its flowability is restrained

and wherein the cross-linking structure of said thermoplastic polymer is formed by ring opening polymerization of the epoxy groups by said polymerization catalyst with the irradiation of a ultraviolet ray or the application of heat.

17. (Currently amended) ~~The light-emitting diode device of claim 12, which comprises a composition comprising~~ A light-emitting diode device comprising a light-emitting diode element, a circuit board, a fluorescent material-containing resin, a lens and a fluorescent material-containing resin sealing frame, wherein said circuit board is adhered to the sealing frame by an adhesive sheet comprising the reaction product of

10 to 95 mass % of a polyolefin copolymer containing epoxy groups in its molecule, as a thermoplastic polymer containing epoxy groups,

4 to 80 mass % of a polyolefin copolymer containing carboxylic acid ester groups in its molecule, as a thermoplastic polymer containing no epoxy groups, and

1 to 20 mass % of a rosin containing carboxyl groups in its molecule, as a compound containing functional groups which are addition reactive with said epoxy groups, and wherein said composition is irradiated with an electron ray to form a cross-linking structure therein and in which each of said thermoplastic polymer is cross-linked so that its flowability is restrained.

18. (Currently amended) The light-emitting diode device of claim ~~42~~ 16, wherein the thermoplastic polymer flow property is 110 to 210 %.

19. (Currently amended) A light-emitting diode device according to claim ~~42~~ 16, wherein said sealing frame has functions of reflectivity and heat-radiation property.

20. (Currently amended) The light-emitting diode device of claim ~~42~~ 16 further comprising a reflecting plate and a heat-radiation plate or box, wherein said circuit board is adhered by the adhesive sheet to the heat-radiation plate or box, or to the reflecting plate.

21. (New) The light-emitting diode device of claim 16, wherein said thermoplastic polymer containing epoxy groups is obtained by copolymerizing a vinyl groups-containing monomer with an epoxy groups-containing monomer which is copolymerizable with said vinyl groups-containing monomer.

22. (New) The light-emitting diode device of claim 17, wherein the thermoplastic polymer flow property is 110 to 210 %.

23. (New) A light-emitting diode device according to claim 17, wherein said sealing frame has functions of reflectivity and heat-radiation property.

24. (New) The light-emitting diode device of claim 17 further comprising a reflecting plate and a heat-radiation plate or box, wherein said circuit board is adhered by the adhesive sheet to the heat-radiation plate or box, or to the reflecting plate.